

7 July 1967

REAPPRAISAL OF THE AIR STRIKES AGAINST TARGETS IN HANOI~~SECRET~~

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Summary

During the period 25 April-10 June 1967 a total of 420 sorties were flown against significant military and economic targets in the Hanoi area, including 8 [ ] fixed targets. These attacks have caused significant disruptions to normal life in Hanoi but have not caused the regime to change its attitude toward continuing the war.

About one-half of Hanoi's population has been evacuated as has some industry and most of the government ministries. Food and water supplies have become tighter, more expensive and less reliable but all essential requirements continue to be met. The transportation system both within and leading to Hanoi performs adequately. Although the city has only half its normal capacity to generate electric power, a system of rationing, alternative sources of power and a reduced demand because of dispersal programs makes it possible to maintain adequate supplies.

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JCS review(s)  
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REAPPRAISAL OF THE AIR STRIKES AGAINST TARGETS IN HANOIMagnitude of the Campaign

1. Since 25 April 1967 a total of 8 [ ] targets have been struck within a 10-mile radius of the city of Hanoi. (See Table) In addition attacks have been flown against a few important [ ] targets, and SAM sites and other antiaircraft installations in the area. There have been no attacks against [ ] targets in the Hanoi area since the 10 June strike against the Hanoi power-plant.

2. During the 20 April-10 June campaign 270 sorties were flown and approximately 500 tons of ordnance were dropped against [ ] fixed targets. At least 150 attack sorties were flown against [ ] fixed targets ~~downing~~, SAM and AAA sites, and targets of opportunity within the Hanoi area. These operations are summarized in the tabulation below.

	<u>Number of Targets</u>	<u>Attack Sorties</u>	<u>Ordnance (Tons)</u>
[ ]	8	270	500
[ ]	NA	150	200
[ ]	NA	420	700

A... Comprised of [ ] SAM sites, and other pre-planned and armed reconnaissance targets such as bridges, barges, storage areas, and AAA sites.

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General Effects

3. The bombing of targets in the Hanoi area has not drastically changed the attitudes of the North Vietnamese regime toward continuing the war but it has significantly disrupted normal life in the capital. At the end of May the regime announced some steps to ease the difficulties caused by the bombing in the Hanoi area, including the evacuation of all non-essential people and the construction of additional air raid shelters. The population was advised to store kerosene and kerosene lamps and to dig communal wells.

4. The evacuation program which the regime has been promoting for well over a year was more rigidly enforced in May. [REDACTED]

[REDACTED] about one-half of Hanoi's population, mostly children and old people, had been evacuated to areas between 10 and 60 kilometers from Hanoi. Before the recent bombing these two groups had been encouraged to leave Hanoi but the regime was not successful in implementing the program until the more obligatory and forcible evacuation of both groups took place in May. Only able-bodied people between the ages of 20 and 40 are said to remain in Hanoi, presumably to carry on essential economic activity.

5. [REDACTED] all of the North Vietnamese government ministries except Foreign Affairs and National Defense have been evacuated, leaving only a skeleton staff in Hanoi. Foreign embassies and legations have been told they are welcome to evacuate

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60 kilometers northwest of Hanoi. None have accepted the invitation.

6. The water supply in Hanoi has not been seriously affected by the bombing except for a brief period following the first attacks against the Hanoi powerplant in May. Information available as of mid-June indicates that the water supply is, however, irregular and impure because the major pumping station and the auxiliary water supply unit had been hit.

7. Food rations in Hanoi are being maintained at minimum of 13 kilograms per person per month with the help of food imports from the other Communist countries; however, the percentage of wheat flour or other secondary crops making up part of the rice ration has increased.

8. Official food prices in Hanoi have not risen but free market prices have gone up since 1966. Although the official price for rice is about 15 cents per kilogram, <sup>the</sup> ~~but the~~ free market price in April 1967 was about \$1.00 per kilogram. Meat is in short supply and the normal meat ration of 150 grams per month is being met with fat.

9. The amount of damage to civilian structures in Hanoi is remarkably light in view of the intensity of the attacks on relatively small but heavily defended targets in areas close to civilian housing. An intensive analysis of post-strike photography

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through the 10 April-22 May period of heavy attacks against Hanoi reveals only 181 civilian structures destroyed or damaged, 135 of which were located along one target, the Yen Vien Railroad Classification Yard. It is probable that an additional 150 houses were damaged or destroyed as a result of attacks against the Hanoi Thermal Power Plant, the Ha Dong Army Barracks and Supply Depot, and the Van Dien Vehicle Depot early in June.

Transportation

10. Transportation within Hanoi continues much as it has in past months. There are no indications of a shortage of gasoline for official and military cars, busses, and trucks in Hanoi, and foreign embassies continue to receive all the gasoline they require. Soviet buses are observed in operation both in Hanoi and in the environs of the city, and there are no indications that the electric power shortage has affected the use of the street car system.

11. The requirement for transportation within Hanoi has also been reduced by the evacuation of all people not engaged in essential activity. Large numbers of people normally rely on bicycles, and triicycles, /ox carts for transportation. These conditons make it possible to provide essential passenger and intra-city freight transportation. ~~Street cars and buses have been reported to be crowded on holidays.~~

12. While air strikes have been successful in destroying or damaging key rail and highway bridges <sup>and</sup> ~~as~~ interdicting important rail yards and sidings, linking Hanoi with the rest of the country,

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North Vietnamese repair efforts, aided by Chinese Communist engineering units, have been adequate to maintain traffic. Virtually all the major bridges on the rail lines leading into Hanoi from the north and east have been by-passed, and in some cases, more than one type of bypass is employed. A bypass to the damaged Hanoi Railroad Highway Bridge, for example, was in service within a month of the attack, and the original bridge was completely repaired within six weeks.

13. Although the bombing of the rail system has produced some adverse effects, the system still has the capability of transporting sufficient quantities to support North Vietnam's economy and war effort. Rail transportation into Hanoi continues, although it is disrupted occasionally but never completely stopped. The important roads and waterways leading to Hanoi have been attacked repeatedly, causing some difficulties in transport operations but repairs and countermeasures have effectively<sup>ly</sup> maintained traffic movements. In general, the combined rail, road, and water transport system into Hanoi is excellent and provides a flexible network for the movement of supplies. If any one mode is interdicted, the others are available to ensure the continuation of traffic.

#### Electric power

14. Available electric power supply in the Hanoi area currently is estimated at 20,000 kw to 25,000 kw. Since late in May, as a result of bomb damage to 3 of 7 boilers, the Hanoi powerplant has been operating at about one-half

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its rated capacity of 32,500 [redacted] diesel-driven generating stations reportedly located in or near the city probably can supply an additional 5,000 kw. The combined power supply is sufficient to cover 40 percent to 50 percent of normal demands.

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15. Normal pre-strike power demands for the city of Hanoi and vicinity ranged from 50,000 kw to 60,000 kw. This demand was furnished by the Hanoi powerplant, and by power drawn from the main transmission network through the Dong Anh substation north of the city. All of the main powerplants feeding the network and the Dong Anh substation are out of operation. In each case, restoration of these facilities to partial operation will require 3 months or longer. Except for the installation of additional diesel generating equipment, there is little prospect of significantly improving Hanoi's present power supply before late summer.

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16. [redacted]

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[redacted] Rationing is on a highly

selective basis, with buildings housing foreigners apparently receiving one of the highest priorities. [redacted]

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There is no reliable information on the effects of restricted power supply on local industry. The dispersal of the population and of some industry has reduced the normal pre-strike demand for power. It is likely, therefore, that the regime is still able to satisfy all essential power demands in Hanoi.

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